HMS Colossus

Dive Trail Update 2012

Project Report



Kevin Camidge

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	Project Report
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Kevin Camidge October 2012

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Project Name

Colossus Dive Trail Update

Summary Description

In 2009 a dive trail was installed on the stern section of the wreck of *HMS Colossus*. This consists of a number of seabed observation stations around the wreck and an underwater information booklet to guide divers around the site. The guide booklet explains the exposed remains and gives details of the background to the loss of *HMS Colossus*. In 2012 the dive trail was extended to include two new dive stations. The existing dive stations underwent routine maintenance and the underwater guide was updated.

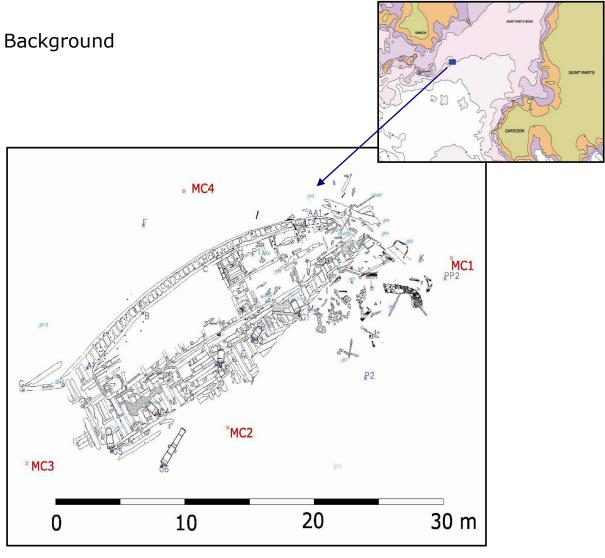


Fig 1
The stern of Colossus as drawn in 2003. The inset shows the location in St Mary's Roads, Scilly.

The Ship

HMS Colossus was a 74 gun warship built in 1787 at Gravesend and wrecked off Samson in the Scillies in 1798. These 74 gun ships were one of the most successful types of the period. They were typically about 51m (170 feet) in length and had a crew of over 600. During her relatively short working life (eleven years) Colossus saw action at Toulon, Groix, Cape St Vincent and Cadiz. She also took part in the capture of two enemy ships, Le Vanneau and Vrai Patriot, in 1793 (ADM 52 3006). She had no less than nine different captains during her relatively short career. She had a complete refit, which took six months, in 1796.

In December 1798 *Colossus* was on her way home to England with wounded from the Battle of the Nile and a cargo including part of Sir William Hamilton's second collection of Etruscan pottery. She was sheltering from a gale in St Mary's Roads when the anchor cable parted and she was driven aground to the south of Samson. All but one member of the crew were taken off safely before *Colossus* turned onto her beam ends and proceeded to break up.

Vital Statistics

Length (MGD) Breadth Tonnage	172' 3" (52.5m) 47' 9" (14.6m) 1703 tons
Draught (hold) Standard armament	20' 9½" (6.3m) 28 x 32lb main gun deck 28 x 18lb upper gun deck 14 x 9lb quarter deck 4 x 9lb forecastle
Ballast	110 tons of iron ballast and 250 tons of shingle
Ordered Laid down Launched	13 th December 1781 October 1782 4 th April 1787

Fig 2 Table showing dimensions of HMS Colossus (Lavery, 1983)

The Site

The wreck of *HMS Colossus* lies to the south of Samson in the Isles of Scilly. To date two main areas of wreckage have been identified, the bow and the stern. In 1975 part of the wreck (probably the bow) was designated under the Protection of Wrecks Act. This designation was revoked in 1984. The current site, the stern, was designated in 2001, and is located at Latitude 49° 55′.471N, Longitude 006° 20′.505W (260154.906E 5535593.077N UTM zone 30, WGS84).

Previous work

Salvage work took place on *Colossus* from the time of her loss until the early part of last century. Work included Braithwaite and Tonkin 1803-1806, the Dean Brothers in the 1830s and possibly Western Marine Salvage in the early part of last century.

Roland Morris, a marine salver and proprietor of the Penzance Maritime Museum, began searching for the wreck of *Colossus* in 1967 using a small team of divers. In August 1974 they located material relating to *Colossus*. The site was designated in 1975 under the Protection of Wrecks Act 1973 (Wessex Archaeology, 2003). A large quantity of pottery, remains of Hamilton's second collection of pottery, was recovered and deposited in the British Museum – where at least one of the reconstructed pots is now on public display. Once Morris' team had finished their work, the site was de-designated in 1984.

Areas of exposed timber and iron guns were discovered by local divers in 2001. This material was some distance to the east of the area worked by Morris and turned out to be part of the stern of *Colossus*. This was designated in July 2001. Late in 2001 the Archaeological Diving Unit (ADU) excavated at the stern of *Colossus* as well as around a piece of carved timber, which turned out to be one of the stern quarter-pieces of the vessel.

In 2002 this quarter-piece, part of the stern decoration of the vessel, was recovered from the site. This is currently undergoing conservation at the Mary Rose Trust. Later that year a small excavation was undertaken on the site to establish the nature and extent of the structural remains.

In 2003, a two-year site stabilisation trial was commissioned by English Heritage, to determine the most effective method of slowing down the deterioration of the exposed timbers on the seabed (Camidge, 2005a).

In 2004 and 2005, the Cornwall and Isles of Scilly Maritime Archaeology Society (CISMAS) carried out a survey of the debris field surrounding the wreck of *Colossus* (Camidge, 2005b).

From 2002 to 2007, the author carried out monitoring of the sediment levels on the site. This work demonstrated that the sediment levels around the stern section of *Colossus* had continued to fall throughout this period.

In 2008 a small area at the stern of the wreck was protected with a geotextile covering of Terram 4000. The efficacy of this type of protection on this site was established in the stabilisation trials commissioned by English Heritage (2003-2005). Timber sample blocks were installed beneath the Terram mat and on the seabed. A small seabed sign was also installed to inform visiting divers of the function of the Terram protection. Before the Terram was installed the area to be covered was recorded in detail, along with a control area, so that the long term effects of the stabilisation could be determined (Camidge, 2008).

Reports covering all the work on *Colossus* since 2001 can be downloaded at www.cismas.org.uk

Objectives

The objectives of this project were to undertake routine maintenance to the existing dive stations, to extend the dive trail by adding two new dive stations and to update the existing underwater guide book for divers. The seabed sign was also renewed.

The Dive Trail

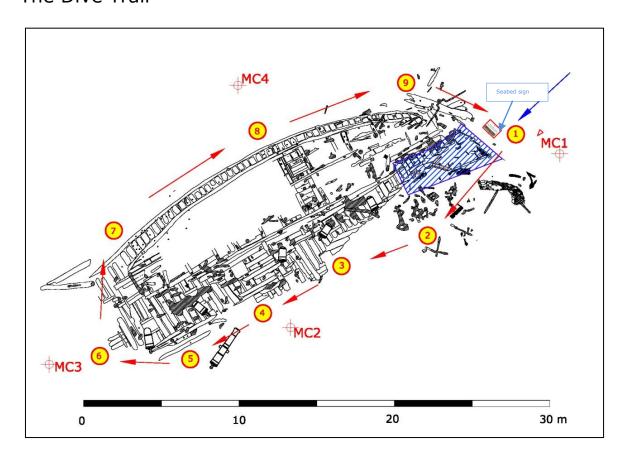


Fig 3 Layout of the existing seabed stations (1-9), starting and ending at the existing seabed sign. The blue arrow shows where divers enter the site, and the red arrows show the circular tour around the site

The layout of the existing dive trail is shown in fig 3 above. Two new dive stations (10 and 11) have now been added to the dive trail as shown in fig 4 below. The two new dive stations take in a large iron spar which is possibly part of the steering gear (station 10), and one of the quarterdeck 9 lb guns (Gun 7, station 11). As these two new stations lie some distance from the main area of the wreck, a lead-weighted bottom line has been laid from station 1 to station 10 and then on to station 11 (see fig 4). This should ensure that divers are able to locate the new dive stations easily.

The new dive stations are identical to the existing dive stations, and consist of small concrete sinkers with numbered floats attached with rope to the sinkers. These float approximately 1m above the seabed.

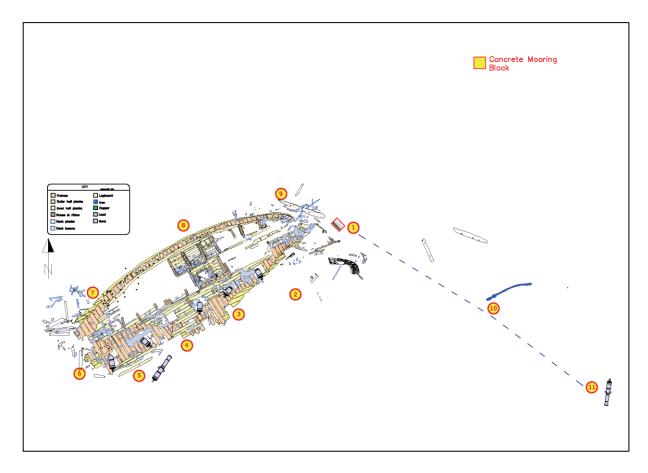
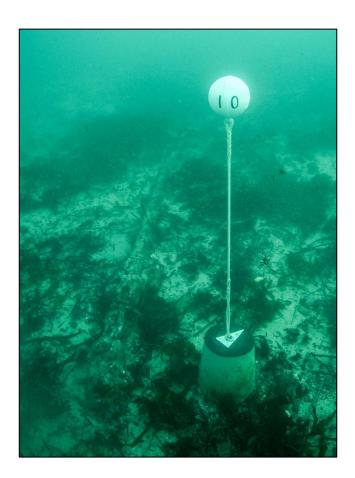


Fig 4 The layout of the extended dive trail. The new stations are numbered 10 and 11. The dashed line shows the location of the lead bottom line placed to guide divers to the new stations.

The nine existing dive stations have become covered in weed growth since installed in 2009. The floats and rope risers which attach them to the seabed sinkers were removed for maintenance in September 2012. The growth will be removed from the floats and the rope risers will be checked and repaired as necessary. They will be reinstalled in spring 2013 in time for the diving season.



Station 10, the site of the enigmatic iron spar – possibly part of the steering mechanism. The iron spar is 4.65m long and can be seen to the left of the station marker

Fig 5



Fig 6 Station 11, the site of Gun 7, one of the 14 9lb Armstrong pattern quarter-deck guns from Colossus. Note the gun is upside down and still has part of the gun carriage ironwork attached.

Seabed Sign

The seabed sign installed as part of the limited site stabilisation in 2008 has now become heavily covered in a marine growth (probably algae). This is likely to be due to the relatively shallow depth of the site, which allows high light levels to penetrate to the seabed. Previously this growth was removed from the sign by wiping with diving gloves. However, someone has now attempted to 'clean' the sign using a sharp object (probably a diving knife) – this has damaged the lettering of the sign, rendering it partly illegible.



Fig 7

The seabed sign in May 2009 – showing the effects of marine growth and cleaning using a sharp implement.

The possibility of replacing the seabed sign with something more durable was investigated. An etched stainless steel sign was investigated – but unfortunately this proved to be very expensive indeed. Therefore the sign was replaced in PVC (*fig 8* below) – as per the original sign – in September 2012. This will probably become damaged again, but the cost of a more durable sign would seem to be prohibitive.



Fig 8 The new seabed sign in place on the seabed September 2012.

Underwater Guide

Copies of the underwater guide booklets are held by the local dive boat skippers and are loaned to divers for their visit to the site. It has been constructed so that divers can take a copy underwater with them. Each dive skipper has eight copies of the guide. Three are held by the Isles of Scilly Museum (for loan to visiting divers) and three further copies are held by English Heritage Maritime

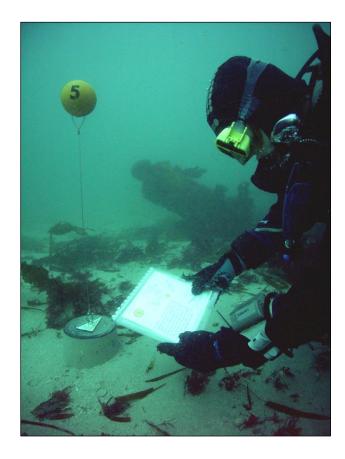


Fig 9
The underwater guide book in use by a visiting diver

Four new pages have been produced to cover the additional stations which have been added to the dive trail (stations 10 and 11). These will be sent to the dive skippers on Scilly so that they can be added to the existing dive guides. These additions are reproduced in appendix I below.

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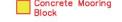
Appendix I – Update to the Underwater Guide

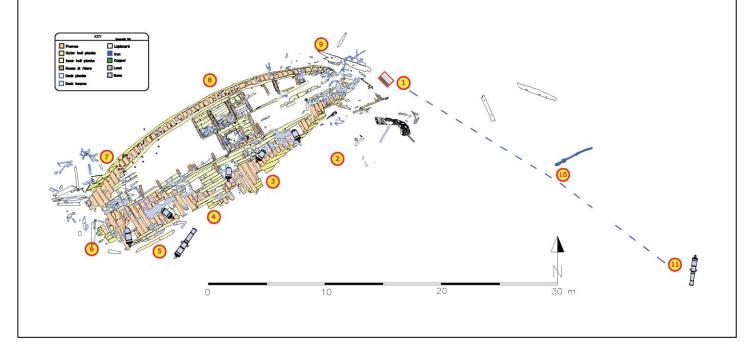


Fig 10 The underwater guide book



HMS Colossus Dive Trail Additional Stations 2012





[FRONT COVER]

HMS Colossus Dive Trail

Read this page before the dive

From the surface follow the shot line to the seabed, and the site is 20m south west of the shot line – there is a lead line you can follow from the shot to seabed station 1. Each seabed station has an arrow pointing to the next station.

Start your visit at station 1 and follow the station markers around the wreck in numerical order. After station 9 you will arrive back at station 1.

In the autumn of 2012 two new dive stations were added to the dive trail. These new stations are numbered 10 and 11. The new stations lie some distance from the main wreckage. To help you to find the new dive stations a blue, speckled lead line has been fastened to the seabed to lead you to stations 10 and 11. This lead line starts at station 1, leads to station 10 and then on to station 11. Please do not pull on the lead line or it may become detached from the seabed. Once you have visited station 11 return along the lead line to the start of the diver trail at station 1.

Station

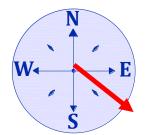


You should be looking at a long iron object on the seabed. We are not certain what this large iron 'spar' was used for — but it may have been part of the steering gear of the ship. It is 4.65m long and slightly curved throughout its length.





Next Station



8.5m

Station







At this station you can see one of the Armstrong pattern 9lb guns from *Colossus*. This gun would originally have been on the quarter deck of the ship. Notice that the gun now lies upside down with the iron fastening bolts of the wooden gun carriage still attached to the gun. This is the last station on the dive trail – follow the blue lead line back to the start of the trail.

[BACK COVER]